

Resource Summary Report

Generated by PRECISE-TBI on Sep 8, 2026

Cell Line Ontology

RRID:SCR_005840

Type: Tool

Proper Citation

Cell Line Ontology (RRID:SCR_005840)

Resource Information

URL: <http://www.clo-ontology.org/>

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Description: A community-driven ontology that is developed to standardize and integrate cell line information and support computer-assisted reasoning. Its focus is on permanent cell lines from culture collections. Upper ontology structures that frame the skeleton of CLO include Basic Formal Ontology and Relation Ontology. Cell lines contained in CLO are associated with terms from other ontologies such as Cell Type Ontology, NCBI Taxonomy, and Ontology for Biomedical Investigation. A common design pattern for the cell line is used to model cell lines and their attributes, the Jurkat cell line provides an example. Currently CLO contains over 36,000 cell line entries obtained from ATCC, HyperCLDB, Coriell, and by manual curation. The cell lines are derived from 194 cell types, 656 anatomical entries, and 217 organisms. The OWL-based CLO is machine-readable and can be used in various applications. The CLO development has become a community effort with international collaborations. The development consortium includes experts from all over the world: the USA, Europe, and Japan.

Abbreviations: CLO

Resource Type: controlled vocabulary, data or information resource, ontology

Keywords: cell line, owl, ontology, standardization, information integration

Availability: The community can contribute to this resource

Resource Name: Cell Line Ontology

Resource ID: SCR_005840

Alternate IDs: nlx_149363

Alternate URLs: <http://bioportal.bioontology.org/ontologies/1245>,
<http://purl.obolibrary.org/obo/clo.owl>

Record Creation Time: 20220129T080232+0000

Record Last Update: 20260905T132542+0000

Ratings and Alerts

No rating or validation information has been found for Cell Line Ontology.

No alerts have been found for Cell Line Ontology.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Kyoda K, et al. (2024) SSBD: an ecosystem for enhanced sharing and reuse of bioimaging data. Nucleic acids research.

Sarntivijai S, et al. (2014) CLO: The cell line ontology. Journal of biomedical semantics, 5, 37.